

DECLARATION

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **DNA RECOMBINATION IN EUKARYOTIC CELLS BY THE BACTERIOPHAGE PHIC31 RECOMBINATION SYSTEM** the specification of which is attached hereto or X was filed on July 21, 2000 as Application No. 09/620,800 and was amended on (if applicable).

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Country	Application No.	Date of Filing	Priority Claimed Under 35 USC 119

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date
60/145,469	July 23, 1999

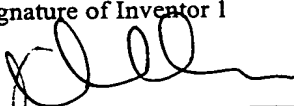
I claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Date of Filing	Status

Full Name of Inventor 1:	Last Name: OW	First Name: DAVID	Middle Name or Initial: W.
Residence & Citizenship:	City: Hercules	State/Foreign Country: California	Country of Citizenship: United States
Post Office Address:	Post Office Address: 127 Brenner Street	City: Hercules	State/Country: California
Full Name of Inventor 2:	Last Name: CALENDAR	First Name: RICHARD	Middle Name or Initial:
Residence & Citizenship:	City: Berkeley	State/Foreign Country: California	Country of Citizenship: United States
Post Office Address:	Post Office Address: 940 Euclid	City: Berkeley	State/Country: California

Full Name of Inventor 3:	Last Name: THOMASON	First Name: LYNN	Middle Name or Initial:	
Residence & Citizenship:	City: Albany	State/Foreign Country: California	Country of Citizenship: United States	
Post Office Address:	Post Office Address: 1061-H, Monroe Street, #7	City: Albany	State/Country: California	Postal Code:

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature of Inventor 1  _____ David W. Ow	Signature of Inventor 2 _____ Richard Calendar	Signature of Inventor 3 _____ Lynn Thomason
Date 9/21/00	Date	Date

SF 1117981 v1

DECLARATION

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **DNA RECOMBINATION IN EUKARYOTIC CELLS BY THE BACTERIOPHAGE PHC31 RECOMBINATION SYSTEM** the specification of which _____ is attached hereto or X was filed on July 21, 2000 as Application No. 09/620,800 and was amended on _____ (if applicable).

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Country	Application No.	Date of Filing	Priority Claimed Under 35 USC 119

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Application No.	Filing Date
60/145,469	July 23, 1999

I claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Date of Filing	Status

Full Name of Inventor 1:	Last Name: OW	First Name: DAVID	Middle Name or Initial: W.
Residence & Citizenship:	City: Hercules	State/Foreign Country: California	Country of Citizenship: United States
Post Office Address:	Post Office Address: 127 Brenner Street	City: Hercules	State/Country: California
Full Name of Inventor 2:	Last Name: CALENDAR	First Name: RICHARD	Middle Name or Initial:
Residence & Citizenship:	City: Berkeley	State/Foreign Country: California	Country of Citizenship: United States
Post Office Address:	Post Office Address: 940 Euclid	City: Berkeley	State/Country: California

Full Name of Inventor 3:	Last Name: THOMASON	First Name: LYNN	Middle Name or Initial:	
Residence & Citizenship:	City: Albany	State/Foreign Country: California	Country of Citizenship: United States	
Post Office Address:	Post Office Address: 1061-H, Monroe Street, #7	City: Albany	State/Country: California	Postal Code:

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature of Inventor 1 _____	Signature of Inventor 2 <u>Richard Calendar</u>	Signature of Inventor 3 <u>Lynn Thomason</u>
David W. Ow	Richard Calendar	Lynn Thomason
Date	Date <u>21 September 2000</u>	Date <u>21 September, 2000</u>



02307B - 09901001

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

KA Weber



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JANUARY 05, 2001

PTAS
TOWNSEND AND TOWNSEND AND CREW LLP
TIMOTHY L. SMITH
TWO EMBARCADERO CENTER, 8TH FLOOR
SAN FRANCISCO, CA 94111-3834

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/31/2000

REEL/FRAME: 011208/0300
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
OW, DAVID W.

DOC DATE: 09/25/2000

ASSIGNEE:
AGRICULTURE, UNITED STATES, AS
REPRESENTED BY THE SECRETARY,
THE
800 BUCHANAN STREET
ALBANY, CALIFORNIA 94710-1105

SERIAL NUMBER: 09620800
PATENT NUMBER:

FILING DATE: 07/21/2000
ISSUE DATE:

TARA WASHINGTON, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

01 JAN 10 AM 10:30
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TOWNSEND & TOWNSEND
& CREW

11-08-2000

Attorney Docket No. 02307B-099010US

FORM PTO-1595
(Rev. 6-93)U.S. Department of Commerce
Patent and Trademark Office

To the Honorable Asst. Commissioner for P

101508585

documents or copy thereof

1. Name of conveying party(ies):

David W. OW

Additional name(s) of conveying parties attached? ☐ Yes
x No.

2. Name and address of receiving party(ies)

Name: The United States, as represented by the Secretary of
Agriculture

Internal Address:

Street Address: 800 Buchanan Street

City: Albany State: California ZIP: 94710-1105

Additional names and addresses attached? ☐ Yes xNo

3. Nature of conveyance:

X Assignment ☐ Merger☐ Security Agreement ☐ Change of Name☐ Other:

Execution Date: September 25, 2000

4. Application Number(s) or Patent Numbers.

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s): 09/620,800

B. Patent No(s):

Additional numbers attached? ☐ Yes X No5. Name and address of party to whom correspondence
concerning document should be mailed:Name: Timothy L. Smith
TOWNSEND AND TOWNSEND AND CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
(415) 576-0200

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41): \$40.00

☐ Enclosed ☒ Charge Fees to Deposit Account☒ Charge any additional fees associated with this paper or during
the pendency of this application, or credit any overpayment, to
deposit account.

8. Deposit account number: 20-1430

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true of copy of the
original document.*Kenneth A. Weber
Name of Person SigningKenneth A. Weber
Signature10-27-00
Date

Atty. Reg. No. 31,677

Total number of pages including cover sheet, attachments and document 3

10. Change Correspondence Address to that of Part 5? X Yes ☐ No

OMB No. 0651-0011 (exp. 4/94)

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Mail documents to be recorded with required cover to:

Asst. Commissioner for Patents
Box: Assignments
Washington, D.C. 20231

11/07/2000 00000052 201430 09620800

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40.00 CH

Attorney Docket No.: 2307B-099010US
Client Reference No.: B99-099

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, David W. Ow, of 127 Brenner Street, Hercules, California, Richard Calendar of 940 Euclid, Berkeley, California and Lynn Thomason of 1061 H. Monroe Street, #7, Albany, California, are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: DNA RECOMBINATION IN EUKARYOTIC CELLS BY THE BACTERIOPHAGE PHIC31 RECOMBINATION SYSTEM

Date(s) of execution of Declaration:

Filing Date: July 21, 2000

Application No.: 09/620,800; and

WHEREAS, Richard Calendar and Lynn Thomason have assigned their rights in the above referenced application to the Regents of the University of California; and

WHEREAS, the United States, as represented by the Secretary of Agriculture, (the Assignee) is desirous of acquiring an assignment of said patent rights;

WHEREAS, the United States patent rights in said invention are assignable to the United States by virtue of Assignor having made the invention while in the employ of the United States Department of Agriculture under applicable law and regulations of the United States Department of Agriculture which render the patent rights so assignable; and

NOW, THEREFORE, in consideration of these premises, Assignor hereby assigns to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.
Dated: 9/25/00 _____
David W. Ow

STATE OF California)

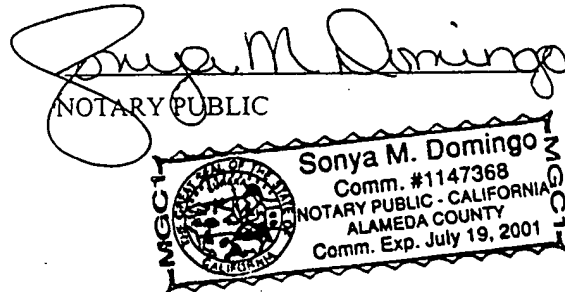
) ss.

COUNTY OF Alameda)

On September 25, 2000, before me, Sonya M. Domingo personally appeared David W. Ow, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

My Commission Expires: July 19, 2001





02307B-099010US

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

KAWeber



101508584A

JANUARY 05, 2001

PTAS
TOWNSEND AND TOWNSEND AND CREW LLP
TIMOTHY L. SMITH
TWO EMBARCADERO CENTER, 8TH FLOOR
SAN FRANCISCO, CA 94111-3834

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RECORDATION DATE: 10/31/2000

REEL/FRAME: 011208/0235
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
CALENDAR, RICHARD

DOC DATE: 09/21/2000

ASSIGNOR:
THOMASON, LYNN

DOC DATE: 09/21/2000

ASSIGNEE:
REGENTS OF THE UNIVERSITY OF
CALIFORNIA, THE
1111 FRANKLIN STREET, 12TH FLOOR
OAKLAND, CALIFORNIA 94607-5200

SERIAL NUMBER: 09620800
PATENT NUMBER:

FILING DATE: 07/21/2000
ISSUE DATE:

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& CREW
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011208/0235 PAGE 2

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ASSIGNMENT DIVISION
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11-08-2000

File Docket No. 02307B-099010US

FORM PTO-1595

(Rev. 6-93)



101508584

To the Honorable Asst. Commissioner for Patents

U.S. Department of Commerce
Patent and Trademark Office
Documents or copy thereof

1. Name of conveying party(ies):

Richard CALENDAR and Lynn THOMASON
Additional name(s) of conveying parties attached? ☐ Yes
x No.

3. Nature of conveyance:

X Assignment ☐ Merger☐ Security Agreement ☐ Change of Name☐ Other:

Execution Date: September 21, 2000

2. Name and address of receiving party(ies)

Name: The Regents of the University of California

Internal Address:

Street Address: 1111 Franklin Street, 12th Floor

City: Oakland State: California ZIP: 94607-5200

Additional names and addresses attached? ☐ Yes x No

4. Application Number(s) or Patent Numbers.

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s): 09/620,800

B. Patent No(s):

Additional numbers attached? ☐ Yes X No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Timothy L. Smith, Ph.D.
TOWNSEND AND TOWNSEND AND CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
(415) 576-0200

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41): -----\$40.00

☐ Enclosed ☒ Charge Fees to Deposit Account☒ Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account.

8. Deposit account number: 20-1430

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9. Statement and signature.

*To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true or copy of the original document.*Kenneth A. Weber
Name of Person Signing
Signature10-27-00
Date

Atty. Reg. No. 31,677

Total number of pages including cover sheet, attachments and document 2

10. Change Correspondence Address to that of Part 5? X Yes ☐ No

OMB No. 0651-0011 (exp. 4/94)

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Asst. Commissioner for Patents
Box: Assignments
Washington, D.C. 20231

11/07/2000 AGHMD1 00000053 201430 09620800

01 FC:581

40.00 CH

ASSIGNMENTU.C. Case No. B99-099

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

1. Richard Calendar 2. Lynn Thomason
 3. _____ 4. _____

hereby sells, assigns and transfers to ASSIGNEE, The Regents of the University of California, a California Corporation, having its statewide administrative offices located 1111 Franklin St., 12th Floor, Oakland, CA 94607-5200, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in UCB Case No. B99-099, entitled:

DNA RECOMBINATION IN EUKARYOTIC CELLS BY THE BACTERIOPHAGE PHIC31 RECOMBINATION SYSTEM

and which is found in

- (a) _____ U.S. provisional application filed herewith and listing the above-named persons as inventors
 (b) _____ U.S. patent application filed herewith and listing the above-named persons as inventors
 (c) X _____ U.S. application serial no. 09/620,800, filed on July 21, 2000
 (d) _____ U.S. Patent No.: _____, issued _____

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 USC 111(a) or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of the University of California.

executed this

day of 21 September, 2000day of 21 September, 2000

day of _____, 20

day of _____, 20

Signature of Inventor(s)

Richard CalendarLynn Thomason